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COLUMNISTS

PC at Work

Thin-client economics revive 'dead' OS/2

By Peter Coffee October 25, 1999 9:00 AM ET



I pushed one button and deployed a network in 29 seconds per node. It was worth my trip to Atlanta to see this fulfillment of the vision of network computing delivered by Serenity Systems' technology based on IBM's

OS/2.

Atlanta's city seal shows a phoenix rising from a fire with a motto above reading "Resurgens." This presumably commemorates Atlanta's recovery from Civil War destruction, but it was also an appropriate image for the International OS/2 Users Convention, which is whimsically known as Warpstock.

Atlanta was devastated, not by the attacking Union army, but by the departing Confederate forces blowing up their military supplies before fleeing Sherman's troops. In the same way, the greatest damage to OS/2 has been done not by its competitors, but by a lack of focus from its owners at IBM.

IBM is awakening to the value of its OS/2 assets. In the last year, the company seems to have rethought its positioning of OS/2 Warp Server as an entry-level product, reinforcing it with an advanced file system and other technologies that make it a superb e-commerce option. IBM's OS/2-based WorkSpace On-Demand (www-4.ibm.com/software/network/workspace) is a ready-to-roll option for slashing the costs of managing desktop computing.

OS/2 enjoys strong loyalty from key market sectors such as banks, especially overseas, where at least one bank attributed previous losses to the mushrooming ownership cost of fat-client PCs. Serenity

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objectively considering alternative operating systems such as Linux, for its managed desktop computing line—including the WiseManager product with which I made that one-touch deployment demo in Atlanta.

As keynote speaker for the Warpstock conference, I invited the attendees to consider the often misleading metaphor of the information superhighway. There are many things wrong with this metaphor, but it makes one accurate point: In a standards-based environment, whether it's defined by a stripe down the road or by TCP/IP, you can drive what you like instead of what a majority mandates.

A highway is not a railroad. Railroads require conformance to exact specifications, such as spacing of wheels and maximum dimensions of each car. Highways, like the Internet, make it easy to create new branches to new destinations and can readily handle a range of vehicles designed for different purposes. All you have to do is fit through the toll gates and obey traffic signals. And so, I asked the audience, now that we have a highway, who wants to drive a Pinto? (Our overseas guests asked me to clarify that reference; I told them it referred to a product that was shipped with known bugs in the interest of rapid time to market and that the expression "crashed and burned" might have been based on its record of poor error handling.)

I showed the group a chart of auto production by maker in which BMW's output was a tiny bar compared with the taller bars of GM, Ford, Toyota and Volks wagen. BMW drivers aren't considered freaks, geeks or cultists, I asserted; I told the OS/2 users that it was time for them to shed such labels as well. It's been easy for OS/2 enterprise sites to get the impression that they were lonely holdouts against the Sherman-like march of Windows NT. Not so; the phoenix may yet rise.

Is OS/2 meeting your needs? Tell me at peter coffee@zd.com.

See more PC at Work columns.



Pyte





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Free & Trial OS/2 Software (OS/2 Renewed; Digital Libraries, Page 3)

By Bill Nicholls

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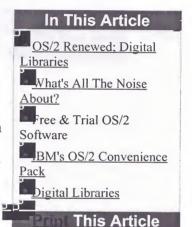
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May 28, 2001 0

IBM has a page for free and trial OS/2 software.

In addition to the search items listed, there are 12 categories of additional free, demo, and trial software available for OS/2 from IBM.

There are links to the Device Driver Catalog, the Software Choice Catalog, and IBM Fixpaks. Fixpak 15 is the latest brus 2500 for Warp V4.



The Device Driver area offers the latest (release 4) video drivers from SciTech Suite of Drivers. SDD704.exe is the current free download, which I am using in four systems with good results. Software choice users have access to a later version.

Netscape/Mozilla Version 6.01:

IBM has worked with the Mozilla site to provide an OS/2 version of Netscape 6.01. The version from IBM's software choice site has the Flash plugin.

The free version is here: www.mozilla.org/releases. Scroll down the page to OS/2 Web browser and download the IBM contributed version. This does not include the Flash plugin.

- HTML 4.0
- DHTML (World Wide Web Consortium W3C compliant)
- XML 1.0
- JavaScript 1.5
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Netscape 6.01 Features (based on Mozilla):

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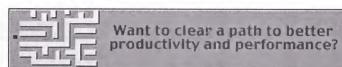
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- Document Object Model (DOM 1.0)
- Java2 (Java 1.3)
- Support SSL 3.1 128/168 bit encryption
- Macromedia Flash Plugin for OS/2 by Innotek (software choice only)

From Germany, an updated CD Writer for OS/2: RSJ CD Writer for OS/2 Version 3.55.

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Advanced Software & Technologies Bill Nicholls

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What's All The Noise About? (OS/2 Renewed; Digital Libraries, Page 2)

By Bill Nicholls

May 28, 2001

Until the middle of 2000 it seemed that, like an old soldier, OS/2 would fade away. But at WarpTech 2000, put on in May 2000 by the Phoenix OS/2 Users Society, IBM announced support for OS/2 through 2006 with enhancements coming in a Convenience Pack.

Also at WarpTech 2000, I got first looks at Simplicity for Java, a powerful programming

OS/2 Renewed; Digital Libraries
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management. For the full story, see my report on Byte.com from last year, "WarpTech 2000 -- Full of Surprises".

Recently, I received a copy of Serenity Systems eCommStation, an enhanced Warp V4 with built-in software.

environment, and Wise Manager for software and systems

eCommStation, an enhanced Warp V4 with built-in software management and a pair of powerful application suites. I will install and test eCS on my heavily used workstation, and will report next time on my experiences. The eCS site has news and download links for free and purchase software. It's well worth the visit.

All of this activity in OS/2 is certainly encouraging for those of us who have become used to its capabilities. The most important event however, is in the extended *business* infrastructure. IBM has licensed the ability to package OS/2 in various combinations for sale by another company, Serenity Systems. The person coordinating the eCS release is the director of new business, Bob St. John. This represents a sea change for IBM's OS/2 users.

While there have been no official statements, it is my opinion that Serenity Systems will become the core support for OS/2 in non-enterprise environments. Indeed, the package put together by Serenity Systems (see below) is a

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complete business desktop without any Microsoft entrails stuck to it. For managing more than a few desktops, Wise Manager is also available. Wise Manager takes the software management in a single machine and extends it to large groups of machines on one or more networks, including support for several operating systems in addition to OS/2. See the WarpTech 2000 link above and the Serenity Systems link for more on Wise Manager.

The official introduction of eCS is scheduled for May 19, 2001.

Serenity System's eCommStation release 1 includes:

- SmartSuite 1.6 -- from Lotus
- StarOffice 5.1 -- an office software suite
- IBM Desktop On Call -- remote control of eCommStation
- Serenity Systems' WiseMachine -- manages software installs
- IBM's JFS (Journaling File System) -- the new file system
- Optional SMP Multiple Processor capability
- Improved CD booting and hardware recognition
- eCS Clock -- synchronizes system clock with time servers
- eStylerLite -- enables changes to the look of onscreen graphic controls.
- Additional applications -- VoiceType, IBM's BonusPak, third-party utilities, desktop enhancers, and more.

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IBM's OS/2 Convenience Pack (OS/2 Renewed; Digital Libraries, Page 4)

By Bill Nicholls

May 28, 2001

Here is a brief outline of the Convenience Pack features.

For Warp V4:

- Supports the Journaled File System with 4 MBs of cache
- Java 1.3 with RMI-IIOP, Swing, JAAS and more DBCS support
- A new Netscape browser based on Mozilla with Macromedia Flash support
- TCP/IP 4.3.1, with 2K sockets and tuned for Java 1.3 configuration
- USB support for print and device drivers for keyboard, mouse, and modem
- USB drivers for Digital Audio, 1.44 and LS-120 floppies
- USB drivers for 100 and 250-MB IOMEGA ZIP drives

For Warp V4 Server for e-business -- All the above, plus:

- Lotus Domino Go Web server 4.6.2.8
- IBM WebSphere Application Server 3.02

The convenience pack is available from IBM by subscription or <u>Software Choice</u>.

The Internet, XML, and DCMI

The most important element in future Internet access will be understanding content, not just format. Anyone who has done a search knows that the pearls you need are well hidden in the swine, which often outnumber the pearls 100 to 1. This is not just an optional "nice to have" feature. With

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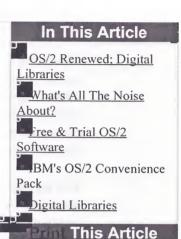
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Downl Appli over 10 million servers and petabytes (a petabyte is a trillion megabytes) of data online, and with continuing exponential growth, the Internet has grown past the ability of any one site to index it.

The information is out there, but where? Information is the key here. We are not looking for data, we're *drowning* in data. What we need is some way to discern meaning from the mass of data that rides the electromagnetic waves. Fortunately, help is almost at hand.

The key element is all of this is a standard way to define content and semantics. This starts with XML, the eXtended Markup Language, a subset of SGML that is becoming the core of content identification. If you haven't looked at XML, it's time to start. And the logical place to start is www.xml.org.

Once you have sampled the XML concept, next on the menu is the <u>Dublin Core Metadata Initiative</u>. The DCMI defines some basic metadata elements for all content, with optional elements and extendable elements for special purposes. Metadata is data about data. It is a higher level, more general description of the specific data.

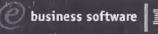
For instance, this column is written by Bill Nicholls. A metadata element would be Author, the specific data element would be the name of the author. The basic set of DCMI elements is at dublincore.org/documents/dces/. What DCMI does is define a standard way to specify what type of data each part of the content is. Once that is available, we can go to the next step.

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Digital Libraries (OS/2 Renewed; Digital Libraries, Page 5)

By Bill Nicholls

May 28, 2001

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One of the critical differences between the Internet and Libraries is that libraries are organized. Each book, magazine or paper gets a category assigned to it, such as the Dewey Decimal System or the Library of Congress Classification. Each item in the collection gets a unique identification such as the ISBN for books. All items are indexed in a in a real or virtual card file. This indexing, done by

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humans not computers, incorporates category and meaning to the index.

Internet search engines cannot automatically categorize, they can only index. Without categories or metadata, all words have equal value and no specific context or meaning. Thus search engines can only display hits based on finding specific words or phrases. While this does work to a limited degree, the huge size of the internet has reduced the value of this approach. My experience with searches varies, but the usual results are a frustrating checking of dozens of items to find just one near miss.

Digital Libraries (DL) are one answer to the explosion of data. A DL is a virtual library, with organized and indexed storage of digital data. The key difference from the rest of the Internet is the existence of metadata that categorizes the data elements. The value of a library is its organization as much as its content. A good place to start exploring the DL concept is www.dlib.org. I recommend the first two articles in the April 2001 issue at that site www.dlib.org/dlib/april01/04contents.html.

A single digital library can provide good tools, but how does one work with multiple DLs? How can we insure some



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compatibility at the index level, which one might call the meta-metadata level. More than XML and DCMI are needed.

The answer is in another developing standard, the Open Archive Initiative (OAI). This proposed standard defines a way that indexes at a single library can be accessed through a standard API to enable creation of super indexes, or simply search for specific items.

Wrapping Up

This brief introduction to digital libraries is just to whet your appetite for a look into the future of DLs and the Internet. To repeat my earlier note, the core of all of these standards is XML, and thankfully, XML 1.0 is now supported in Mozilla release 0.9, and in the OS/2 Netscape 6.01 version from IBM, which is based on the Mozilla code.

The Mozilla browser, after a long and difficult development period, is now working well, if not perfectly. I am using both NS 4.61 for OS/2 and Mozilla 6.01 at the same time in my system and I am pleased with the faster performance of the Mozilla browser. It's time to make sure you have XML support in your browser.

Next time I'll report on my experiences with eCS and some of the applications. I'll also take a deeper look into XML and digital libraries, and their future impact on the web. EME

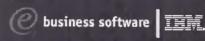
Bill Nicholls was educated as a physicist, but early in his college career became seduced by the computing side of the force. Since then, he has badgered mainframes, minis, and micros into mostly doing what he wanted, though with varying degrees of difficulty. Software has always been his primary interest, from writing an OS to applications. Don't ask him to do another payroll though.

For more of Bill's columns, visit the Utility Infielder Index.

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Karen's Korner

Authored by: Karen L. Mansbridge-Wood, May 4, 2000

"OS/2 Is Rescued By The Internet"

One of Germany's most important computer related magazine's, "c't" contains a recent interview with John Soyring of IBM. The article offers and interesting counterpoint to recent public statements about interviews given by Soyring to an American magazine writer.

The interview by Volker Weber is titled "OS/2 is rescued by the Internet". The title came from Soyring's response when asked, "if you were allowed to think up a title line without the word 'e-business', what would you choose?"

- Answering a question about the concept of a "thin client" and "network computing' and whether it will work in regard to "e-business" Soyring responded: "We have a product running on OS/2 called Workspace on Demand, which is very successful, especially in Germany".
- Asked about why IBM themselves do not use OS/2 much: "The applications which are available on the market run on Windows. Therefore we will use Windows clients for most users within IBM. And we advise a lot of our customers to do the same."

One of the many devastating setbacks for OS/2 customers has been the unwillingness of software developers to develop applications which are specific to OS/2. The argument often advanced by those companies for failing to produce OS/2 versions in the past was: OS/2 runs Windows applications just fine, so why should we invest in developing OS/2 software? They had a point. Now they argue that there aren't enough OS/2 users around to justify development. They don't have a point, but one understands their reluctance to run afoul of MS. Those software developers who have developed OS/2 specific software, largely small ISVs, tend to exploit the OS/2 community by offering substandard programs at inflated prices and expecting OS/2 users to be grateful for their attention.

- Asked it if applications being made available only for Windows wasn't "no good news for the OS/2 client" Soyring offered his opinion: "No, they aren't. And they weren't. In the future, there will be a real advantage through browser-based applications, because they are

independent of the operating system." And: "There are a lot of applications where Windows is not well suited, and we simply have to support both environments (OS/2 and Windows, R.S.). In the future, we can build applications which run on Windows or on OS/2 or on a Nokia phone or on a Palm VII."

IBM's new vision of the future isn't based on the idea of an all powerful operating system to which applications must comply, but on the development of cross platform applications that will run on any client. This notion must make the more exploitative software developers in the OS/2 community shake in their boots. It should. When OS/2 users can run any application that any Windows user can run, in exactly the same version from the same company, how much of hold will these people have on OS/2 users? What's going to happen to the guy who sells substandard OS/2 applications to OS/2 users who don't have a choice, when he has to compete with higher quality platform independent programs from the major software developers? We can only hope that he will go broke, which is exactly what he deserves. OS/2 users have a right to expect the same quality and quantity of available applications software as users of the MS alternative. Cross platform applications offer one possible solution to the OS/2 user's biggest complaint.

Speaking only for myself, if given my choice of running WordPerfect under Windows or under OS/2, I choose OS/2, and I suspect that a great many others would choose OS/2 as well. If the applications are identical, the operating system is not, and many users who have refrained from using OS/2 in the past because of the lack of applications might very well be encouraged to make the switch to a more stable and reliable operating system if they didn't have to give up their favorite applications in order to do it.

- Does that mean that IBM no longer considers the operating system important and plans to emphasize applications in the future, Soyring offered this correction: "I would never say the operating system is not important. We have a large number of OS/2 customers who rely heavily on OS/2 and therefore we will support them."

This certainly flies in the face of recent reports that IBM is determined to make OS/2 users "migrate" to some other operating system. IBM is focused on seeing to it that it's customers are given the support they need to make their own decisions viable in the future, and that includes the customers' choice of operating system.

- On native OS/2 application development: "The proprietary OS/2 programming model is absolutely dead. We have already been

advising our customers for years not to go with proprietary models, and, by the way, not for Windows or Unix either."

So much for the much touted "transition to Windows" we've all heard so much about. IBM is no longer actively promoting the development of OS/2 specific applications software. They also aren't promoting the development of Windows or Unix specific applications software. They are promoting software which is "write once, run anywhere" applications software.

- Soyring said that he was not allowed identify specific customers, but contrary to the opinions of many they are still getting new OS/2 customers, including some overseas banks who expressed the opinion that "OS/2 is more reliable than Windows."
- On IBM's long term objectives for OS/2: "We have plans to further support and develop OS/2. We'll revise those plans each year and will keep adding new functions." He then added: "We will deliver other functions our customers have been asking from us."
- Soyring refused comment on the number of developers working on OS/2 or whether that number was increasing or decreasing. He sited security reasons for his refusal to address the issue.
- Asked if he expected developers to program for the WPS, SOM and DSOM, considering "the OS/2 programming model is dead," he said "Surely not for SOM or DSOM." But he qualified his statement by saying that the knowledge they had gained there would be usable in the field of Enterprise Java Beans. "What we recommend today is not so much a technique developed by IBM, but a standard, on which software industry has come to agree about. ... I want to emphasize once more that we will go on supporting existing applications. But for new applications we do not recommend the proprietary OS/2 API."
- On the subject of Project Odin: "We know about Project Odin and we will watch it further. Like I said, our top priority is to support the e-business application framework and to disencourage development for proprietary programming models. Odin supports a proprietary model, namely Win32 on OS/2. We will find out through talking to our customers whether they are interested in technologies like Odin."

I think what we may be seeing is a rather considerable transformation going on at IBM. And that transformation in no way neglects or fails to support future development of OS/2. Rather the new emphasis is on convincing applications developers to abandon the idea of platform specific application software

which always leaves customers at a disadvantage. IBM is announcing in the clearest possible terms that it favors the customers right to choose over any other consideration. And with the development of cross platform applications software, the customer can choose OS/2.

website < http://www.heise.de/ct/>

Karen

Don't miss these other fine articles from Karen's Korner:

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- Here a Q, There a Q, Everywhere an ICQ 4/26/00

Karen L. Mansbridge-Wood offers "Karen's Korner" a user site dedicated to the promotion and support of IBM's OS/2 Operating System. The site is currently under construction, but most of the features are fully implemented. Feel free to browse. Participation in the message board and chat area require the use of a password, which may be obtained by subscribing to her address list.

Stop by and sign her guestbook today!

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Microsemi maverick opts for OS/2

Company division selects IBM's operating system for its stability, affordability and ease of use

By Grant Du Bois, PC Week Online November 22, 1999 12:00 AM ET

When Mike Krueger joined Microsemi Corp. in early 1995, he had an important decision to make: Windows, NetWare or OS/2?

At that time, there were just a few desktop PCs with Microsoft Corp.'s DOS and Windows 3.1 in the semiconductor manufacturer's Colorado Division, in Broomfield. Most of the division used text-based dumb terminals connected to a Wang Laboratories Inc. VS 100 minicomputer. "We had to get the division modernized and provide users with more productivity-type software aids" such as Lotus Development Corp.'s SmartSuite and Notes and Netscape Communications Corp.'s Communicator, said Krueger, a senior programmer/analyst responsible for the division's IT services.

But before that could happen, Krueger needed a client/server environment to run applications.

His upgrade options included Windows 95, which was then still in beta; Windows for Workgroups 3.11, which had peer-to-peer networking but was not robust enough for the division's client/server setup; Novell Inc.'s NetWare, which Krueger felt was too complex and expensive to staff; and IBM's OS/2, which appeared to be the perfect match for the division's requirements.

"OS/2 had all the functionality we needed and was more robust than anything available [in early 1995]," Krueger said. He also attributed the upgrade to "a 'more bang for the buck' sort of thing," as IBM provided thin-client technology that was less expensive than

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Krueger's decision seemed to fly in the face of practicality, given Windows' market dominance. But he chose OS/2 because it is a proven, solid operating environment that is easy to use and integrates well with current systems.

Krueger is somewhat of a maverick in his own company—the division is the only Microsemi site using OS/2—but he's not alone in choosing IBM's operating system. Well-known companies such as Ford Motor Co., Norwest Venture Capital and MCI WorldCom Inc. chose OS/2 to meet their business needs. And Krueger does not plan to replace the operating system any time soon, despite what's happening in the market. "We'll use it as long as IBM supports it and it can be supported," he said.

Millennium OS

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OS/2 overload

Krueger is very much tied to OS/2. Over the past five years, he's poured \$150,000 to \$200,000 into upgrading hardware, software and networking/switching equipment as well as maintenance and service contracts.

He purchased a client/server version of OS/2 WarpConnect 3.0 for desktops and IBM's LAN Server 4.0 (now Warp Server), which includes DB2/2 (now DB2 Universal Database). Hummingbird Communications Ltd.'s Exceed provides host connectivity to a new Wang VS 5460 minicomputer that runs ERP (enterprise resource planning) applications and to IBM's Netfinity 5500, which Krueger calls a "bloated PC." Other desktop configurations include 20 Windows NT Workstation 4.0 clients that work in conjunction with 35 OS/2 desktops.

The other client products are IBM's Workspace On-Demand, which allows eight thin clients on the shop floor to load OS/2 remotely, and Exodus Technologies Inc.'s Nterprise, which delivers NT Workstation 4.0 applications through an X Window System protocol to the clients. The thin-client setup works well for Microsemi, which makes power semiconductors and custom diode assemblies.

OS/2 allows the Colorado Division's users to access SmartSuite, providing them with more organization in order entry, purchasing, shipping, inventory, human resources and accounting reports—which used to be done through a dumb-terminal interface, Krueger said.

For instance, Paul Ellerman, a quality engineer with the division, said that OS/2 is easy to learn and use, loads quickly, and doesn't crash. "A true test of a system is how much difficulty you have with it, and we have no trouble with OS/2," Ellerman said.

He uses OS/2 for SPC (statistical process control), which monitors the real-time product manufacturing

process on the shop floor, and lot norming, which uses statistical evaluation to determine whether the electrical attributes of a product are correctly grouped.

"SPC is truly a beautiful thing with OS/2," Ellerman said. "I ... look at SPC at various nodes or critical points in the process [to gather] statistical data on the specific electrical attributes of a component."

Shutting out Windows

Krueger stands behind OS/2, despite the fact that a company investment in Microsoft's Office means outfitting more desktops with NT Workstation 4.0.

However, he hopes OS/2 remains the division's main operating system. "I haven't considered Windows 2000 and don't want to jump on the bandwagon, but I'd consider it if faced with the choice," he said.

Case File

Company: Microsemi Corp.

Location: Headquarters in Santa Ana, Calif.; Colorado Division in Broomfield

The need: The Colorado Division had depended upon dumb terminals connected to a minicomputer that limited user productivity. The environment needed to be updated to a user-friendly operating system and workgroup applications that would increase employee organization and efficiency.

The solution: IBM OS/2 operating environment that included fully loaded desktop PCs as well as a thin-client setup.

What's next: Upgrade to IBM's Workspace On-Demand 2.0 thin-client server and move some desktops to Windows NT Workstation 4.0 to support Office. The division will also investigate having company applications hosted by application service providers.

Toolbox: Intel Pentium and AMD K6 desktop PCs; IBM OS/2 WarpConnect 3.0 (now 4.0); IBM Warp Server; IBM DB2 Universal Database; Hummingbird Communications Ltd.'s Exceed, for host connectivity to Wang and IBM minicomputers; IBM Workspace On-Demand thin-client server; Exodus Technologies Inc.'s Nterprise, to deliver Microsoft Windows NT Workstation 4.0 applications; as well as Lotus SmartSuite, Lotus Notes and Netscape Communicator.